

REMARKS

The Final Office Action mailed October 15, 2007, has been received and reviewed. Claims 1 and 3-14 are currently pending in the application. Claims 1 and 3-14 stand rejected. Applicant has amended claims 1 and 12-14, and respectfully request reconsideration of the application as amended herein.

35 U.S.C. § 102 Anticipation Rejections

Anticipation Rejection Based on U.S. Patent No. 5,713,074 to Hulbert

Claims 1, 4-6, 8-9, 11 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,713,074 to Hulbert. ("Hulbert"). Applicant respectfully traverses this rejection, as hereinafter set forth.

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Brothers v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The identical invention must be shown in as complete detail as is contained in the claim. *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

Applicant submits that Hulbert does not and cannot anticipate under 35 U.S.C. § 102 the presently claimed invention of amended independent claim 1 and claims 4-6, 8, 9 and 11 depending therefrom, and amended independent claim 14, because Hulbert does not describe, either expressly or inherently, the identical inventions in as complete detail as are contained in the claims.

Applicant's invention as claimed generally recites:

- (1) *repeating a step until a sum of energy reaches a certain level,*
- (2) the level of *the energy used at the time the process ended was itself insufficient for correct demodulation* of the data, and
- (3) the repeating occurs in the same transmission direction (i.e., from the base station to the mobile station each time).

Regarding a sum of energy, Applicant's invention as presently claimed in amended independent claims 1 and 14, recite in part, "*repeating* [retransmitting] until a sum of the first and further symbol *energy amounts ... is great enough to*" Hulbert discloses no such thing.

In fact, Hulbert conflictively discloses making power *changes based only upon the current occurrences* (i.e., whether an error occurs or does not occur in the then-present data) and not a "sum" of previous and current occurrences. Specifically, Hulbert discloses:

Whenever an error is detected, the transmitted power is increased by an amount U dB.
Whenever an error is not detected, the transmitted power is decreased by an amount D dB. (Hulbert, col. 3, lines 17-20).

Hulbert clearly discloses that "repeating" does not end based upon any historical information (i.e., a sum of energy amounts from a first transmission and from retransmissions) as claimed by Applicant. Accordingly, Hulbert cannot anticipate under 35 U.S.C. §102 Applicant's invention as presently claimed.

Regarding energy itself being insufficient for correct demodulation, Applicant's invention as presently claimed in amended independent claims 1 and 14, recite in part, "*the traffic information is retransmitted ... with a further symbol energy amount that is also insufficient by itself for correct demodulation of the traffic information*". Hulbert discloses no such thing. In fact, Hulbert conflictively discloses that if any "retransmission" occurs in Hulbert, then the occurrences would clearly end when the signal level exceeded the necessary power level for correct demodulation as Hulbert clearly and unequivocally discloses that power is increased until no errors are detected. Specifically, Hulbert again discloses:

Whenever an error is detected, the transmitted power is increased by an amount U dB.
Whenever an error is not detected, the transmitted power is decreased by an amount D dB. (Hulbert, col. 3, lines 17-20; emphasis added).

Hulbert clearly discloses reaching *a power level that itself is sufficient* for correct demodulation of the traffic information which is in direct contrast to Applicant's symbol energies that are each by themselves insufficient "for correct demodulation of the traffic information". Accordingly, Hulbert cannot anticipate under 35 U.S.C. §102 Applicant's invention as presently claimed.

Regarding repeating retransmission in the same transmission direction, Applicant's invention as presently claimed in amended independent claims 1 and 14, recite in part, "transmitting traffic information *from the base station* ...retransmitting *from the base station*

the traffic information ... and repeating [retransmitting *from the base station*]” Hulbert discloses no such thing. In fact, Hulbert conflictively discloses transmitting from the base station to the mobile station and then “*retransmitting*” (i.e., “reflecting back”; Hulbert, col. 3, lines 46-51) *in the opposite direction from the mobile station* to the base station. Specifically, Hulbert discloses:

... the receiving station 22 simply demodulate[s] the data and communicate[s] this data back to the transmitting station 20, over the link operating *in the other direction*.
(Hulbert, col. 3, lines 8-10; emphasis added).

Hulbert clearly discloses that any “retransmission” is exclusively “reflecting back” and is not “transmitting *[] from a base station* ... retransmitting *from the base station* ... and repeating [retransmitting *from the base station*]” as claimed by Applicant. Accordingly, Hulbert cannot anticipate under 35 U.S.C. §102 Applicant’s invention as presently claimed.

Therefore, since Hulbert does not disclose:

“*repeating* [retransmitting] *until a sum of* the first and further symbol *energy amounts* *... is great enough to ...*” or
“the traffic information is retransmitted ... with a *further symbol energy amount that is also insufficient by itself for correct demodulation of the traffic information*” or
“transmitting traffic information *from the base station* ... retransmitting *from the base station* the traffic information ... and repeating [retransmitting *from the base station*] ...”,

in as complete detail as claimed by Applicant, Hulbert cannot anticipate under 35 U.S.C. §102 Applicant’s invention as claimed in amended independent claim 1, from which claims 4-6, 8, 9 and 11 depend and amended independent claim 14. Accordingly, such claims are allowable over the cited prior art and Applicant respectfully requests that such rejections be withdrawn.

35 U.S.C. § 103 Obviousness Rejections

Claim 3 was rejected under 35 U.S.C. §103(a) as being unpatentable over Hulbert in view of U.S. Patent No. 6,154,659 to Jalali et al. (“Jalali”). Applicant respectfully traverses this rejection, as hereinafter set forth.

The nonobviousness of amended independent claim 1 precludes a rejection of claim 3 which depends therefrom because a dependent claim is obvious only if the independent claim from which it depends is obvious. *See In re Fine*, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988), *see also* MPEP § 2143.03. Therefore, the Applicant requests that the Examiner withdraw the

rejection to amended independent claim 1 and claim 3 which depends therefrom.

Claims 7 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hulbert in view of U.S. Patent No. 6,581,176 to Seo (“Seo”).

The nonobviousness of amended independent claim 1 precludes a rejection of claims 7 and 10 which depend therefrom because a dependent claim is obvious only if the independent claim from which it depends is obvious. *See In re Fine*, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988), *see also* MPEP § 2143.03. Therefore, the Applicant requests that the Examiner withdraw the rejection to amended independent claim 1 and claims 7 and 10 which depend therefrom.

Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hulbert in view of U.S. Patent No. 6,625,132 to Boettger *et al.* (“Boettger”).

To establish a *prima facie* case of obviousness the prior art reference (or references when combined) **must teach or suggest all the claim limitations**. *In re Royka*, 490 F.2d 981, 985 (CCPA 1974); *see also* MPEP § 2143.03. Additionally, there must be “a reason that would have prompted a person of ordinary skill in the relevant field to combine the [prior art] elements” in the manner claimed. *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1742, 167 L.Ed.2d 705, 75 USLW 4289, 82 U.S.P.Q.2d 1385 (2007). Finally, to establish a *prima facie* case of obviousness there must be a reasonable expectation of success. *In re Merck & Co., Inc.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986). Furthermore, the reason that would have prompted the combination and the reasonable expectation of success must be found in the prior art, common knowledge, or the nature of the problem itself, and not based on the Applicant’s disclosure. *DyStar Textilfarben GmbH & Co. Deutschland KG v. C. H. Patrick Co.*, 464 F.3d 1356, 1367 (Fed. Cir. 2006); MPEP § 2144. Underlying the obvious determination is the fact that statutorily prohibited hindsight cannot be used. *KSR*, 127 S.Ct. at 1742; *DyStar*, 464 F.3d at 1367.

The 35 U.S.C. § 103(a) obviousness rejections of amended independent claims 12 and 13 are improper because the elements for a *prima facie* case of obviousness are not met. Specifically, the rejection fails to meet the criterion that the prior art reference must teach or suggest all the claims limitations. Regarding amended independent claims 12 and 13, Applicant

has amended independent claims 12 and 13 to include claim limitations not taught or suggested in the cited references.

The Office Action cites Boettger for teaching a buffer. The Office Action cites Hulbert for teaching Applicant's claim elements as described above. Applicant sustains the above-proffered arguments regarding the deficient teachings or suggestions in Hulbert. Accordingly, Applicant submits that Hulbert in view of Boettger does not and cannot render obvious under 35 U.S.C. § 103 the presently claimed invention of amended independent claims 12 and 13, because the cited references, either individually or in any proper combination, do not teach or suggest all of the claims limitations.

As stated above, Applicant's invention as claimed generally recites:

- (1) *repeating a step until a sum of energy reaches a certain level,*
- (2) the level of *the energy used at the time the process ended was itself insufficient for correct demodulation* of the data, and
- (3) the repeating occurs in the *same transmission direction* (i.e., from the base station to the mobile station each time).

Regarding a sum of energy, Applicant's invention as presently claimed in amended independent claims 12 and 13, recite in part, "transmits ... and retransmits ... until a sum of the first and further symbol energy amounts ... is great enough to ..." Neither Hulbert nor Boettger teach or suggest any such thing. In fact, Hulbert conflictively teaches or suggests making power changes based only upon the current occurrences (i.e., whether an error occurs or does not occur in the then-present data) and not a "sum" of previous and current occurrences. Specifically, Hulbert teaches or suggests:

Whenever an error is detected, the transmitted power is increased by an amount U dB.
Whenever an error is not detected, the transmitted power is decreased by an amount D dB. (Hulbert, col. 3, lines 17-20).

Hulbert clearly teaches or suggests that "repeating" does not end based upon historical information (i.e., a sum of energy amounts from a first transmission and from retransmissions) as claimed by Applicant.

Regarding energy itself being insufficient for correct demodulation, Applicant's invention as presently claimed in amended independent claims 12 and 13, recite in part, "a

further symbol energy amount for retransmitting the traffic information ... wherein *the further symbol energy amount is also insufficient by itself for correct demodulation of the traffic information*". Neither Hulbert nor Boettger teach or suggest any such thing. In fact, Hulbert conflictively teaches or suggests that if any "retransmission" occurs in Hulbert, then the occurrences would clearly end when the signal level exceeded the necessary power level for correct demodulation since Hulbert clearly and unequivocally teaches that power is increased until no errors are detected. Specifically, Hulbert again teaches:

Whenever an error is detected, the transmitted power is increased by an amount U dB.
Whenever *an error is not detected*, the transmitted power is decreased by an amount D dB. (Hulbert, col. 3, lines 17-20; emphasis added).

Hulbert clearly teaches reaching *a power level that itself is sufficient* for correct demodulation of the traffic information which *teaches away* from Applicant's symbol energies that are each by themselves insufficient "for correct demodulation of the traffic information".

Regarding repeating retransmission in the same transmission direction, Applicant's invention as presently claimed in amended independent claims 12 and 13, recite in part, "a base station transmitter ... transmits the traffic information *from the base station* transceiver to the mobile station ... and subsequently retransmits the traffic information *from the base station* transceiver to the mobile station" Hulbert teaches no such thing. In fact, Hulbert conflictively teaches or suggests transmitting from the base station to the mobile station and then "*retransmitting*" (i.e., "reflecting back"; Hulbert, col. 3, lines 46-51) *in the opposite direction from the mobile station* to the base station. Specifically, Hulbert teaches:

... the receiving station 22 simply demodulate[s] the data and communicate[s] this data back to the transmitting station 20, over the link operating *in the other direction*. (Hulbert, col. 3, lines 8-10; emphasis added).

Hulbert clearly teaches that any "retransmission" is exclusively "reflecting back" and is not "transmitting [] from a base station ... retransmitting from the base station ... and repeating [retransmitting from the base station]" as claimed by Applicant.

Therefore, since neither Hulbert nor Boettger, either individually or in any proper combination, teach or suggest Applicant's invention as presently claimed, these references, either individually or in any proper combination, cannot render obvious, under 35 U.S.C. §103, Applicant's invention as presently claimed in amended independent claims 12 and 13.

Accordingly, such claims are allowable over the cited prior art and Applicant respectfully requests that such rejections be withdrawn.

CONCLUSION

Claims 1 and 3-14 are believed to be in condition for allowance, and an early notice thereof is respectfully solicited. Should the Examiner determine that additional issues remain which might be resolved by a telephone conference, the Examiner is respectfully invited to contact Applicant's undersigned attorney.

Respectfully submitted,

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